

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Gilbert Wolrich et al. Art Unit: 2183
Serial No.: 10/070,008 Examiner: Daniel H. Pan
Filed : July 3, 2002
Assignee : Intel Corporation
Title : BRANCH INSTRUCTION FOR PROCESSOR

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants call attention to the attached Information Disclosure Statement and documents listed on form PTO-1449.

This filing is being made with a Request for Continued Examination (RCE). No fee is required.

Documents listed on the herewith Form PTO-1449 were cited in the attached European Search Report dated February 10, 2006, issued in a foreign counterpart application. To the best knowledge of the undersigned, this is the first citation of these items in any communication from a foreign patent office in a counterpart foreign application.

The documents are in the English language; hence no concise explanation is necessary per Rule 98(a)(3).

Consideration of the foregoing and enclosures plus the return of a copy of the enclosed form PTO-1449 with the

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Attorney's Docket No. 10559-311US1
P9632US

Examiner's initials in the left column per MPEP 609 are
earnestly solicited along with an early action on the merits.

Please apply any credits or additional charges to deposit
account 06-1050.

Respectfully submitted,

Date: March 7, 2007

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| Substitute Form PTO-1449 (Modified) | U.S. Department of Commerce Patent and Trademark Office | Attorney's Docket No. 10559-311US1 | Application No. 10/070,008 |
| Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b)) | | Applicant Gilbert Wolrich et al. | |
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| U.S. Patent Documents | | | | | | | |
|-----------------------|-----------|-----------------|------------------|-------------------|-------|----------|----------------------------|
| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
| | AA | 2002/0038403 | 03/2002 | Wolrich et al. | | | |
| | AB | 3,577,189 | 05/1971 | Cocke et al. | | | |
| | AC | 3,881,173 | 04/1975 | Larsen et al. | | | |
| | AD | 4,454,595 | 06/1984 | Cage | | | |
| | AE | 4,471,426 | 09/1984 | McDonough | | | |
| | AF | 4,477,872 | 10/1984 | Losq et al. | | | |
| | AG | 4,569,016 | 02/1986 | Hao et al. | | | |
| | AH | 4,755,966 | 07/1988 | Lee et al. | | | |
| | AI | 4,808,988 | 02/1989 | Burke et al. | | | |
| | AJ | 4,816,913 | 03/1989 | Harney et al. | | | |
| | AK | 4,847,755 | 07/1989 | Morrison et al. | | | |
| | AL | 4,868,735 | 09/1989 | Moller et al. | | | |
| | AM | 5,045,995 | 09/1991 | Levinthal et al. | | | |
| | AN | 5,056,015 | 10/1991 | Baldwin et al. | | | |
| | AO | 5,170,484 | 12/1992 | Grondalski | | | |
| | AP | 5,187,800 | 02/1993 | Sutherland | | | |
| | AQ | 5,189,636 | 02/1993 | Patti et al. | | | |
| | AR | 5,202,972 | 04/1993 | Gusefski et al. | | | |
| | AS | 5,220,669 | 06/1993 | Baum et al. | | | |
| | AT | 5,247,671 | 09/1993 | Adkins et al. | | | |
| | AU | 5,428,779 | 06/1995 | Allegrucci et al. | | | |
| | AV | 5,509,130 | 04/1996 | Trauben et al. | | | |
| | AW | 5,541,920 | 07/1996 | Angle et al. | | | |
| | AX | 5,544,337 | 08/1996 | Beard et al. | | | |
| | AY | 5,572,690 | 11/1996 | Molnar et al. | | | |
| | AZ | 5,600,848 | 02/1997 | Sproull et al. | | | |
| | BA | 5,610,864 | 03/1997 | Manning | | | |

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| Examiner Signature | Date Considered |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | |

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| U.S. Patent Documents | | | | | | | |
|-----------------------|-----------|-----------------|------------------|-------------------|-------|----------|----------------------------|
| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
| | BB | 5,669,012 | 09/1997 | Shimizu et al. | | | |
| | BC | 5,680,564 | 10/1997 | Divivier et al. | | | |
| | BD | 5,748,950 | 05/1998 | White et al. | | | |
| | BE | 5,802,373 | 09/1998 | Yates et al. | | | |
| | BF | 5,812,811 | 09/1998 | Dubey et al. | | | |
| | BG | 5,815,698 | 09/1998 | Holmann et al. | | | |
| | BH | 5,815,714 | 09/1998 | Shridhar et al. | | | |
| | BI | 5,819,080 | 10/1998 | Dutton et al. | | | |
| | BJ | 5,832,258 | 11/1998 | Kiuchi et al. | | | |
| | BK | 5,838,975 | 11/1998 | Abramson et al. | | | |
| | BL | 5,848,276 | 12/1998 | King et al. | | | |
| | BM | 5,857,104 | 01/1999 | Natarjan et al. | | | |
| | BN | 5,870,597 | 02/1999 | Panwar et al. | | | |
| | BO | 5,872,963 | 02/1999 | Bitar et al. | | | |
| | BP | 5,875,470 | 02/1999 | Dreibelbis et al. | | | |
| | BQ | 5,898,866 | 04/1999 | Atkins et al. | | | |
| | BR | 5,900,025 | 05/1999 | Sollars | | | |
| | BS | 5,926,646 | 07/1999 | Pickett et al. | | | |
| | BT | 5,937,177 | 08/1999 | Molnar et al. | | | |
| | BU | 5,943,491 | 08/1999 | Sutherland et al. | | | |
| | BV | 5,944,816 | 08/1999 | Dutton et al. | | | |
| | BW | 5,946,222 | 08/1999 | Redford | | | |
| | BX | 5,956,514 | 09/1999 | Wen et al. | | | |
| | BY | 5,993,627 | 11/1999 | Anderson et al. | | | |
| | BZ | 6,005,575 | 12/1999 | Colleran et al. | | | |
| | CA | 6,061,710 | 05/2000 | Eickemeyer et al. | | | |
| | CB | 6,061,711 | 05/2000 | Song et al. | | | |

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| Examiner Signature | Date Considered |
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| U.S. Patent Documents | | | | | | | |
|-----------------------|-----------|-----------------|------------------|--------------------|-------|----------|----------------------------|
| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
| | CC | 6,101,599 | 08/2000 | Wright et al. | | | |
| | CD | 6,115,777 | 09/2000 | Zahir et al. | | | |
| | CE | 6,139,199 | 10/2000 | Rodriguez | | | |
| | CF | 6,141,348 | 10/2000 | Muntz | | | |
| | CG | 6,145,123 | 11/2000 | Torrey et al. | | | |
| | CH | 6,157,988 | 12/2000 | Dowling | | | |
| | CI | 6,195,739 | 02/2001 | Wright et al. | | | |
| | CJ | 6,205,468 | 03/2001 | Diepstraten et al. | | | |
| | CK | 6,223,208 | 04/2001 | Kiefer et al. | | | |
| | CL | 6,223,277 | 04/2001 | Karguth | | | |
| | CM | 6,230,119 | 05/2001 | Mitchell | | | |
| | CN | 6,230,230 | 05/2001 | Joy et al. | | | |
| | CO | 6,230,261 | 05/2001 | Henry et al. | | | |
| | CP | 6,259,699 | 07/2001 | Opalka et al. | | | |
| | CQ | 6,269,391 | 07/2001 | Gillespie | | | |
| | CR | 6,275,508 | 08/2001 | Aggarwal et al. | | | |
| | CS | 6,279,066 | 08/2001 | Velingker | | | |
| | CT | 6,314,510 | 11/2001 | Saulsbury et al. | | | |
| | CU | 6,338,133 | 01/2002 | Schroter | | | |
| | CV | 6,378,124 | 04/2002 | Bates et al. | | | |
| | CW | 6,378,125 | 04/2002 | Bates et al. | | | |
| | CX | 6,385,720 | 05/2002 | Tanaka et al. | | | |
| | CY | 6,401,155 | 06/2002 | Saville et al. | | | |
| | CZ | 6,408,325 | 06/2002 | Shaylor | | | |
| | DA | 6,446,190 | 09/2002 | Barry et al. | | | |
| | DB | 6,496,847 | 12/2002 | Bugnion et al. | | | |
| | DC | 6,505,229 | 01/2003 | Turner et al. | | | |

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| Examiner Signature | Date Considered |
| EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | |

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U.S. Patent Documents

| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee | Class | Subclass | Filing Date If Appropriate |
|------------------|-----------|-----------------|------------------|--------------------|-------|----------|----------------------------|
| | DD | 6,523,108 | 02/2003 | James et al. | | | |
| | DE | 6,543,049 | 04/2003 | Bates et al. | | | |
| | DF | 6,560,629 | 05/2003 | Harris | | | |
| | DG | 6,560,671 | 05/2003 | Samra et al. | | | |
| | DH | 6,564,316 | 05/2003 | Perets et al. | | | |
| | DI | 6,574,702 | 06/2003 | Khanna et al. | | | |
| | DJ | 6,697,935 | 02/2004 | Borkenhagen et al. | | | |
| | DK | 6,862,676 | 03/2005 | Knapp et al. | | | |
| | DL | 6,976,095 | 12/2005 | Wolrich et al. | | | |
| | DM | 6,983,350 | 01/2006 | Adiletta et al. | | | |
| | DN | 7,020,871 | 03/2006 | Bernstein et al. | | | |

Foreign Patent Documents or Published Foreign Patent Applications

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation | |
|------------------|-----------|-----------------|------------------|--------------------------|-------|----------|-------------|----|
| | | | | | | | Yes | No |
| | DO | 0 130 381 | 01/1985 | Europe | | | | |
| | DP | 0 463 855 | 01/1992 | Europe | | | | |
| | DQ | 0 476 628 | 03/1992 | Europe | | | | |
| | DR | 0 696 772 | 02/1996 | Europe | | | | |
| | DS | WO03/019399 | 03/2003 | WIPO | | | | |
| | DT | WO03/085517 | 10/2003 | WIPO | | | | |

Other Documents (include Author, Title, Date, and Place of Publication)

| Examiner Initial | Desig. ID | Document |
|------------------|-----------|---|
| | DU | "HART, Field Communications Protocol, Application Guide", Hart Communication Foundation, pp. 1-74, (1999). |
| | DV | Bowden, Romilly, "What is HART?" Romilly's HART® and Fieldbus Web Site, 3 pages, (1997). <URL: http://www.romilly.co.uk/whathart.htm > |
| | DW | Cheng, et al., "The Compiler for Supporting Multithreading in Cyclic Register Windows", <i>IEEE</i> , pp. 57-62, (1996). |

| | |
|--|-----------------|
| Examiner Signature | Date Considered |
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Other Documents (include Author, Title, Date, and Place of Publication)

| Examiner Initial | Desig. ID | Document |
|------------------|-----------|--|
| | DX | Hennessy et al., <i>Computer Organization and Design: The Hardware/Software Interface</i> , Morgan Kaufman Publishers, pp. 116-119, 181-182, 225-227, 447-449, 466-470, 476-482, 510-519, 712, (1998). |
| | DY | Heuring et al., <i>Computer Systems Design and Architecture</i> , Reading, MA, Addison Wesley Longman, Inc., pp. 174-176 and 200, (1997). |
| | DZ | Heuring et al., <i>Computer Systems Design and Architecture</i> , Reading, MA, Addison Wesley Longman, Inc., pp. 38-40, 143-171, and 285-288, (1997). |
| | EA | Hidaka, Y., et al., "Multiple Threads in Cyclic Register Windows", <i>Computer Architecture News</i> , ACM, New York, NY, USA, 21(2):131-142, May 1993. |
| | EB | Hirata, H., et al., "An Elementary Processor Architecture with Simultaneous Instruction Issuing from Multiple Threads", <i>Proc. 19th Annual International Symposium on Computer Architecture, ACM & IEEE-CS</i> , 20(2):136-145, May 1992. |
| | EC | Intel, "1A-64 Application Developer's Architecture Guide," Rev.1.0, pp. 2-2, 2-3, 3-1, 7-165, C-4, and C-23, May 1999. |
| | ED | Jung, G., et al., "Flexible Register Window Structure for Multi-Tasking", <i>Proc. 24th Annual Hawaii International Conference on System Sciences</i> , vol. 1, pp. 110-116, (1991). |
| | EE | Koch, G., et al., "Breakpoints and Breakpoint Detection in Source Level Emulation", <i>Proc. 19th International Symposium on System Synthesis (ISSS '96)</i> , IEEE, pp. 26-31 (1996). |
| | EF | Moors, et al., "Cascading Content-Addressable Memories", <i>IEEE Micro</i> , 12(3):56-66 (1992). |
| | EG | Okamoto, K., et al., "Multithread Execution Mechanisms on RICA-1 for Massively Parallel Computation", <i>IEEE - Proc. Of PACT '96</i> , pp. 116-121 (1996). |
| | EH | Patterson, et al., <i>Computer Architecture A Quantitative Approach</i> , 2nd Ed., Morgan Kaufmann Publishers, Inc., pp. 447-449, (1996). |
| | EI | Paver, et al., "Register Locking in an Asynchronous Microprocessor", <i>IEEE</i> , pp. 351-355, (1992). |
| | EJ | Philips ED - Philips Components: "8051 Based 8 Bit Microcontrollers, Data Handbook Integrated Circuits, Book IC20", 8051 Based 8 Bit Microcontrollers, Eindhoven, Philips, NL, pp. 5-19 (1991). |
| | EK | Probst et al., "Programming, Compiling and Executing Partially-Ordered Instruction Streams on Scalable Shared-Memory Multiprocessors", <i>Proceedings of the 27th Annual Hawaiian International Conference on System Sciences</i> , IEEE, pp. 584-593, (1994). |
| | EL | Quammen, D., et al., "Flexible Register Management for Sequential Programs", <i>IEEE Proc. of the Annual International Symposium on Computer Architecture</i> , Toronto, May 27-30, 1991, vol. SYMP. 18, pp. 320-329. |
| | EM | Ramsey, N., "Correctness of Trap-Based Breakpoint Implementations", <i>Proc. of the 21st ACM Symposium on the Principles of Programming Languages</i> , pp. 15-24 (1994). |
| | EN | Steven, G.B., et al., "ALU design and processor branch architecture", <i>Microprocessing and Microprogramming</i> , 36(5):259-278, October 1993. |
| | EO | Young, H.C., "Code Scheduling Methods for Some Architectural Features in Pipe", <i>Microprocessing and Microprogramming</i> , Elsevier Science Publishers, Amsterdam, NL, 22(1):39-63, January 1988. |
| | EP | Young, H.C., "On Instruction and Data Prefetch Mechanisms", <i>International Symposium on VLSI Technology, Systems and Applications, Proc. of Technical Papers</i> , pp. 239-246, (1995). |

| | |
|--|-----------------|
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